ABSTRACT

The present invention relates to methods and devices for performing endoscopic cannulation, papillotomy and sphincterotomy and similar procedures. According to the present state of the art, endoscopic cannulation of the common bile duct and papillotomy and similar procedures are accomplished by advancing the device into an endoscope/duodenoscope so that the distal tip of the device exits the endoscope adjacent the sphincter muscles at the Papilla of Vater. The endoscope mechanisms are then manipulated to orient the distal tip of the device to the desired position for proper cannulation of the duct. Due to inconsistencies in, for example, the sphincterotome, anatomy, and endoscope manipulation, it is difficult to accurately and consistently position the sphincterotome for proper cannulation. The steerable sphincterotome of the present invention allows the physician to control the position of the distal tip of the device independently of the endoscope and adjust for inconsistencies in the device and the anatomy. According to the present invention, the handle to which the cutting wire is attached is freely rotatable relative to the catheter. The handle, secured to the cutting wire but rotatable relative to the shaft of the catheter, provides a mechanism to rotate the wire, transmitting the force to rotate the device tip. With the handle rotating independently of the shaft at the proximal end, the force can be applied directly to the distal tip without twisting the entire shaft. Also a rotation lock to maintain the orientation of the tip and/or a rotation marking, to indicate the amount of rotation may be included.